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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/760,094

01/12/2001

Jens Baltersee

2-2-2

1665

24490

7590

01/25/2005

LAW OFFICES OF NAREN CHAGANTI  
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EXAMINER

MUNOZ, GUILLERMO

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/760,094	BALTERSEE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Guillermo Munoz	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4-15 and 19-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 1-25 are pending in the application.

#### ***Response to Arguments***

Applicant's arguments filed September 22, 2004 have been fully considered but they are not persuasive. However, the rejection of claims 4-6, 9-14, and 19-25 has been withdrawn to allow improper multiple dependency claims objections.

Regarding claim 1, the applicants argue that the reference Aris fails to teach a data detection stream, a synchronization stream, a code sequence, and an interference reducing step (see page 8 of the amendment).

Examiners response— The applicant is referred to figure 2, wherein the “CHIP MATCHED FILTER” elements are generally know in the art to be filters having an impulse response matched to a desired chip-sequence signal. The matched filter detects the desired spread spectrum signal in the plurality of spread spectrum signals. The applicant is further referred to figure 3, wherein the early and late signal paths (i.e.  $y(k+\delta)$  and  $y(k-\delta)$ , respectively) are combined to determine the “NEW SAMPLING INSTANT” or synchronization. The applicant is further referred to figure 1, wherein energy estimates of interfering paths are used to remove their effects.

Regarding claim 16, the applicants argue that the reference Aris fails to teach a timing error detector for estimating a delay of a signal path and an interference reduction device (see page 8 of the amendment).

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Examiners response— The applicant is referred to figure 3, wherein the early and late signal paths (i.e.  $y(k+\delta)$  and  $y(k-\delta)$ , respectively) are combined to determine the “NEW SAMPLING INSTANT” based on the averaged timing error. The applicant is further referred to figure 1, wherein energy estimates of interfering paths are used to remove their effects. As stated above, the arguments are not persuasive.

### ***Claim Objections***

Claims 4-15 and 19-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Aris.

Regarding claim 1, Aris et al. teach a Spread Spectrum Time Tracking system which teach all the claimed subject matter “receiving...at least one of the receiving fingers” in claim 1 as follows. Aris et al. disclose rake receive having a number of delay-lock loop or

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tau-dither loop code tracking loops based on early-late gate principals assigned to each finger, note paragraphs 0004 and 0009. Aris et al. teach interference correction based on subtraction of decision statistics of paths within the range of the S-curve, note paragraph 0014.

Regarding Claim 2

Aris et al. further teach the claimed subject matter in paragraph 0014.

Regarding Claim 3

Aris et al. further teach the claimed subject matter in paragraph 0005.

Regarding Claim 16, see claim 1.

Regarding Claim 17

Aris et al. further teach the claimed subject matter in paragraph 0014.

Regarding Claim 18, see claim 2.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 571-272-3045.

The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*William H. T.*

GM  
January 14, 2005

*Jean B. Corrielus*  
**JEAN B. CORRIELUS**  
**PRIMARY EXAMINER**

*1/21/05*